

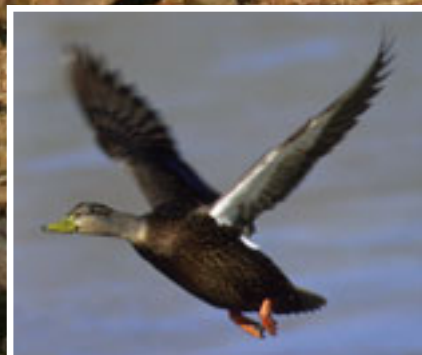
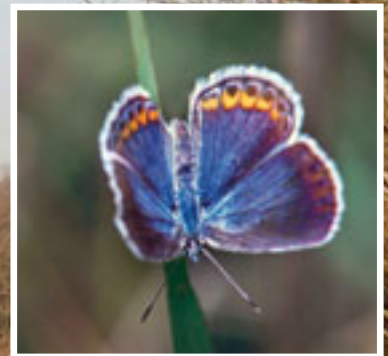


U.S. Fish & Wildlife Service

Great Bay National Wildlife Refuge

*Draft Comprehensive Conservation Plan
and Environmental Assessment*

February 2012



Front cover:

*Great Bay Refuge shoreline
near Woodman Point*
USFWS

Karner blue butterfly
USFWS

Wood thrush
Bill Thompson

Northern myotis
Al Hicks/NYDEC

American black duck
USFWS

Back cover:

*Great Bay Refuge shoreline
near Woodman Point*
USFWS



*This blue goose, designed by
J.N. “Ding” Darling, has become
the symbol of the National Wildlife
Refuge System.*

The U.S. Fish and Wildlife Service (Service) is the principal Federal agency responsible for conserving, protecting, and enhancing fish, wildlife, plants, and their habitats for the continuing benefit of the American people. The Service manages the National Wildlife Refuge System comprised of over 150 million acres including 555 national wildlife refuges and thousands of waterfowl production areas. The Service also operates 70 national fish hatcheries and 81 ecological services field stations. The agency enforces Federal wildlife laws, manages migratory bird populations, restores nationally significant fisheries, conserves and restores wildlife habitat such as wetlands, administers the Endangered Species Act, and helps foreign governments with their conservation efforts. It also oversees the Federal Assistance Program which distributes hundreds of millions of dollars in excise taxes on fishing and hunting equipment to state wildlife agencies.

Comprehensive Conservation Plans (CCPs) provide long-term guidance for management decisions on a refuge and set forth goals, objectives, and strategies needed to accomplish refuge purposes. CCPs also identify the Service's best estimate of future needs. These plans detail program levels that are sometimes substantially above current budget allocations and, as such, are primarily for Service strategic planning and program prioritization purposes. CCPs do not constitute a commitment for staffing increases, operational and maintenance increases, or funding for future land acquisition.



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Great Bay Refuge Vision Statement

Great Bay National Wildlife Refuge will be a treasured cornerstone in protecting and restoring the Great Bay Estuary's unique and significant ecological and cultural resources, which are unparalleled in New England. The estuary's shallow tidal waters will teem with a rich diversity of aquatic resources, from oysters and eelgrass beds, to healthy populations of migratory fish. The refuge's oak-hickory forests, grasslands, shrublands, and freshwater ponds will support a bounty of wildlife throughout the year. During winter, bald eagles will thrill refuge visitors as they taunt the many and diverse flocks of waterfowl and waterbirds foraging and resting in its quiet, protected waters. In spring, the refuge's forests, fields, and wetlands will fill with a symphony of bird songs and frog calls. The summer will reward visitors with the opportunity to view native fledgling birds, fawns, and other young of the year. During the fall, the refuge will host hundreds of migrating species ranging from waterfowl, to songbirds, bats, and butterflies, all needing safe haven in an increasingly urbanized landscape.

Visitors from throughout New England will travel to the refuge to become immersed in the sights and sounds of nature. The refuge will showcase innovative, science-based, adaptive management techniques and, coupled with exceptional outreach, education, and interpretive programs, help raise awareness and appreciation of the natural world and uphold the mission of the National Wildlife Refuge System. The refuge, in collaboration with partners, will work tirelessly to expand the protection and conservation of the Great Bay Estuary and its native habitats and wildlife for the benefit of the American people.

The Karner blue butterfly easement lands in Concord, New Hampshire, will contribute to the recovery of the federally endangered Karner blue butterfly. Each spring, the flowers of native lupine plants growing among pitch pine on the easement lands will attract thousands of adult Karner blue butterflies to feed on nectar. During the summer, an abundance of Karner blue caterpillars will feed on the lupine leaves. As part of an extraordinarily dedicated partnership, the easement is a key link in the network of lands in the Concord area managed to help reverse the butterfly's decline and bring the species back from the brink of extirpation.



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Summary

Type of Action:	Administrative–Development of a Comprehensive Conservation Plan
Lead Agency:	U.S. Department of the Interior, U.S. Fish and Wildlife Service
Location:	Great Bay National Wildlife Refuge Newington, New Hampshire
Administrative Headquarters:	Parker River National Wildlife Refuge Newburyport, Massachusetts
Responsible Official:	Wendi Weber, Regional Director, Region 5
For Further Information:	Nancy McGarigal, Natural Resource Planner Northeast Regional Office 300 Westgate Center Drive Hadley, MA 01035 (413) 253-8562 northeastplanning@fws.gov

This Draft Comprehensive Conservation Plan and Environmental Assessment analyzes three alternatives for managing the 1,103-acre Great Bay National Wildlife Refuge (Great Bay Refuge; the refuge) and the 29-acre Karner blue butterfly conservation easement over the next 15 years. This document also contains 10 appendixes that provide additional information supporting our analysis. Following is a brief overview of each alternative:

Alternative A–Current Management: Alternative A satisfies the National Environmental Policy Act requirement of a “no action” alternative, which we define as “continuing current management.” It describes our existing management priorities and activities for Great Bay Refuge and Karner blue butterfly conservation easement, and serves as a baseline for comparing and contrasting alternatives B and C.

Alternative B–Habitat Diversity and Focal Species Emphasis: Alternative B is the U.S. Fish and Wildlife Service (Service)-preferred alternative. It combines the actions we believe would best achieve the refuge’s purposes, vision and goals, and respond to public issues. Under alternative B, we would emphasize the management of specific refuge habitats to support focal species whose habitat needs benefit other species of conservation concern that are found in the Great Bay region. In particular, we would focus on habitat for priority migratory birds, such as the upland sandpiper; for rare and declining species, such as the New England cottontail and Karner blue butterfly; and for estuarine species of concern, including oysters and eelgrass. We propose removing the Lower Peverly Pond Dam to restore stream habitat, while maintaining the dams at Upper Peverly Pond and Stubbs Pond to benefit a range of fish and wildlife. We would expand our conservation, research, and management partnerships to help restore and conserve the Great Bay estuarine ecosystem. This

alternative would enhance our visitor services programs, which have been limited under current management due to lack of staff. On Great Bay Refuge, we propose to enhance the entrance to the refuge, create new interpretive materials, expand our existing volunteer program, and offer visitors more opportunities to learn about the refuge and the surrounding landscape. On the Karner blue butterfly easement, we propose to install new interpretive signs, offer guided interpretive walks, and enhance our Web-based information.

Alternative C—Emphasis on Natural Processes: Alternative C would rely primarily on ecosystem processes and natural disturbances to restore the biological integrity, diversity, and ecological health of Great Bay Refuge. All grassland and shrubland habitat on the refuge would be allowed to naturally succeed to forest. All three refuge impoundments would be removed, restoring Peverly Brook to stream habitat and returning Stubbs Pond to salt marsh. We would also remove all remaining structures in the former Weapons Storage Area. Under this alternative, we would expand the refuge visitor services program and public access. We would construct two new trails and, as sensitive shrubland and grassland habitats succeed to forest, we would open up larger portions of the refuge to public use. The management of the Karner blue butterfly easement would be the same as that proposed under alternative B.

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